REMARKS

Claim 14 and 21 have been amended. Support for the proviso in new claim 25 can be found, for example, in the specification at table 8 (comparative experiment D) which positively recites cationic compounds. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008 (CCPA 1977). No new matter has been added.

Rejections under 35 USC §103

Claims 1, 10-14, 16-18, 20-21 and 23 stand rejected under 35 U.S.C. 103 as allegedly being unpatentable over Schrecengost et al. (US 6,660,489) in view of Gaylarde et al. (Microbial Contamination of Stored Hydrocarbon Fuels and its Control), further in view of Grubbs et al. (US 4,945,144) or Friswell et al. (US 5,490,872) and Grubbs et al..

Claims 9, 19 and 24 stand rejected under 35 U.S.C. 103 as allegedly being unpatentable over Schrecengost of al. (US 6,660,489) in view of Gaylarde et al. (Microbial Contamination of Stored Hydrocarbon Fuels and its Control), further in view of Grubbs et al. (US 4,945,144) or Friswell et al. (US 5,490,872) and Grubbs et al. as applied to claims 1, 10-14, 16-18, 20-21 and 23 above, and further in view of Calvo Salve of al. (US 5,843,509).

Claims 15 and 22 stand rejected under 35 U.S.C. 103 as allegedly being unpatentable over Schrecengost et al. (US 6,660,489) in view of Gaylarde et al. (Microbial Contamination of Stored Hydrocarbon Fuels and its Control), further in view of Grubbs et al. (US 4,945,144) or Friswell et al. (US 5,490,872) and Grubbs et al. (US 4,945,144) as applied to claims 1, 10-14, 16-18, 20-21 and 23 above, and further in view of Calvo Salve et al. (US 5,843,509), as applied to claims 9, 19, and 24 above, further in view of Green of al. (abstract, Effect of Chemical Sanitizing Agents on ATP Bioluminescence Measurements).

Schrecengost (US 6,660,489) teaches the determination of contaminants on a surface or in a food product via an ATP extraction method for biological samples. See for example, the abstract at lines 6 - 8 and Col. 1 at lines 14 - 17. See also, Col.2 lines 49-60. Food samples are generally composed of organic compounds (e.g., proteins, fatty acids, sugars, salts, organic acids and water). The reference provides no

explanation for the meaning of biological sample and no specific food products are discussed. Schrecengost does not teach or suggest detecting an unknown contaminant in a hydrophobic/non-polar/non-ionic liquid matrix (e.g., fuel).

Furthermore, throughout the Schrecengost reference it is disclosed that the negatively charged anionic substance acts to neutralize the negative effects of the positive charge of the cationic ATP extractant. See, for example Col. 4 at lines 53-61 which states:

> "The present invention provides a method for extracting ATP from a biological sample. In accordance with the extraction method of the present invention, a negatively charged substance, particularly sulfate ion or SDS, is employed during ATP extraction to neutralize the positive charge of commonly used extractants. The anionic substance can be used with extractants such as benzalkonium chloride, benzethonium chloride and dodecyl trimethyl ammonium bromide."

See also Col 2 at lines 64-67; Col. 4 at lines 48-50; Col. 4 at lines 64-67 and Col.5 at lines 10-12.

Thus, Schrecengost does not teach or suggest an anionic substance which functions as an extractant. It is clear from Schrecengost that the cationic substance is the extractant and the anionic substance acts to neutralize the cationic extractant.

With regards to new claim 25, Schrecengost is particularly silent regarding a capture solution that does not contain a cationic extractant.

Gaylarde et al. (Microbial Contamination of Stored Hydrocarbon Fuels and its Control) does not cure the deficiencies of Schrecengost. The Examiner relies upon Gaylarde et al. for its teachings regarding the problem of microbial contamination of fuel supplies. However, Gaylarde et al. does not disclose or suggest any tests for detecting microbial contamination of fuel supplies. It would not have made obvious to use the method of Schrecengost with gasoline, aviation fuel, kerosene or diesel, because the mixtures disclosed by Schrecengost are not suitable for extracting hydrophilic compounds from hydrophobic matrices. As can be seen in table 8 on page 18 of the specification, mixtures comprising benzalkonium chloride (i.e., cationic surfactant) were tested in comparison to mixtures according to the present invention. The experiment shows that the benzalkonium chloride surfactant mixtures were much less suitable for extracting hydrophilic compounds from hydrophobic matices than the extractants of the present invention. See, page 18 at lines 29-31.

Furthermore, even with the knowledge derived from Gaylarde et al (i.e., that fuel supplies can be contaminated by microbes) a skilled worker would not be led to select the test disclosed by Schrecengost, which tests food contamination and not a hydrophobic/non-polar/non-ionic liquid matrix.

The Examiner relies upon Grubbs (US 4,945,149) for its teaching regarding a cationic extractant, methylene blue. However, Grubbs does not teach methylene blue as a cationic extractant as alleged. Grubbs discloses a chemical reaction (i.e., polymerization of 7-oxan-orborene and its derivatives). Water is used as a solvent and methylene blue is used for complex building with polymers. In contrast to Grubbs, in the present invention, dyes are added for an entirely different purpose, to visualize the aqueous phase and not for complex building with polymers. See, for example Col. 10 at lines 45 - 51 of Grubbs which discloses that the polymers prepared show flexible binding cavities which are suitable to coordinate with Na+, K+, and Cs+ salts and preferentially complex large polyaromatic cationic dyes such as methylene blue and rhodamine 6G.

Thus, even if the disclosure of Grubbs is combined with that of Schrecengost the skilled worker would not glean any information regarding the problem solved by the present information (i.e., how to separate hydrophilic compounds like biological material or particles from a hydrophobic/non-Polar/non-ionic liquid).

Friswell (US 5,490,872) discloses suitable markers for the tagging of petroleum, which are only visible if they are extracted in acidic aqueous solution. These markers are useful for the distinguishing of commercial aromatic liquids.

Calvo Salve (US 5,843,509) is relied upon for its teaching that lecithin is a natural surfactant. Calvo Salve discloses the use of positively charged water-soluble polysaccharides and of a negatively charged phospholipid in a stabilized colloidal system. There no relationship whatsoever between the subject matter of the present invention and the teachings of Calvo Salve, which relate to neutralizing positive charges in capture solutions. In the present invention, there is no need for neutralizing positive charges in capture solutions. The disclosure of Calvo Salve is in an entirely different field and a skilled worker would not logically look towards the Clavo Salve

reference for guidance.

Green et al. (Abstract, Effect of Chemical Sanitizing Agents on ATP Bioluminescence Measurements) does not add to the teachings of primary references. Green et al. is relied upon for its teaching regarding sodium hypochlorite is a sanitizing agent that would not negatively affect ATP bioluminescence measurements.

Thus, Friswell (US 5,490,872), Calvo Salve (US5,843,509) and Green et al. do not cure this deficiencies of Gaylarde and Schrecengost in view of Grubbs. None of the references teach or suggest a method for detecting a hydrophilic compound or biological material dispersed in a hydrophobic/non-polar/non-ionic liquid matrix.

Thus, based on the above remarks entry of this amendment and reconsideration of all the rejections is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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